4.2.B. 0602000204.

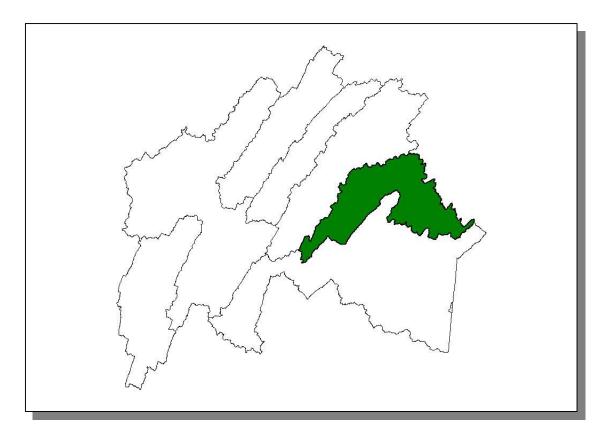


Figure 4-12. Location of Subwatershed 0602000204. All Hiwassee HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

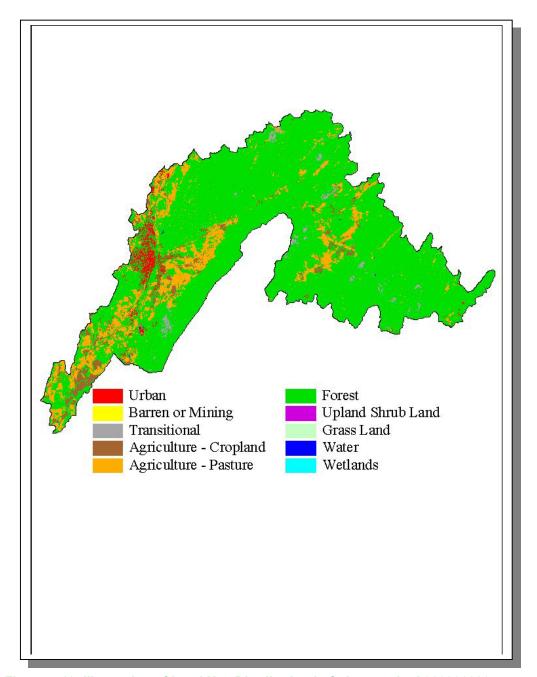


Figure 4-13. Illustration of Land Use Distribution in Subwatershed 0602000204.

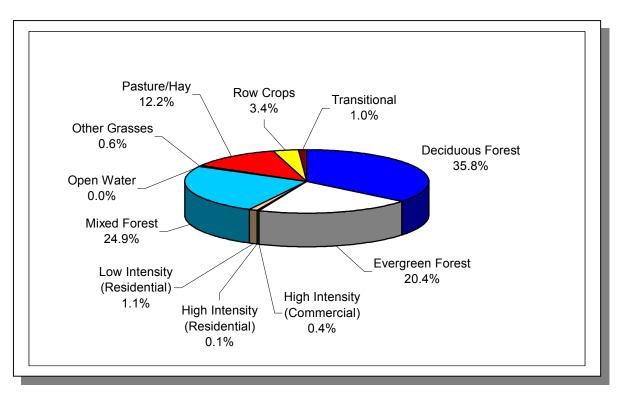


Figure 4-14. Land Use Distribution in Subwatershed 0602000204. More information is provided in Hiwassee-Appendix IV.

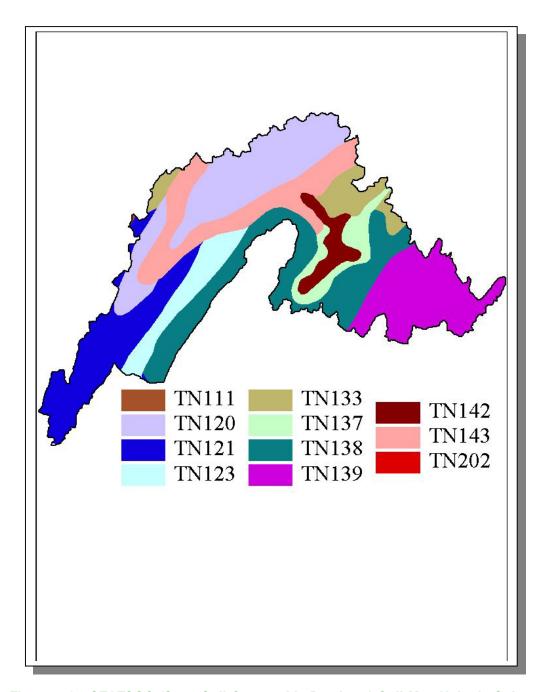


Figure 4-15. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0602000204.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN111	0.00	С	1.41	5.10	Loam	0.34
TN120	0.00	В	1.68	5.11	Loam	0.27
TN121	0.00	В	1.30	5.21	Loam	0.33
TN123	6.00	С	1.30	5.81	Silty Loam	0.37
TN133	0.00	С	1.35	6.04	Clayey Loam	0.27
TN137	0.00	С	3.41	5.34	Silty Loam	0.26
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN139	0.00	С	11.84	4.82	Loam	0.20
TN142	0.00	В	2.20	5.78	Loam	0.31
TN143	0.00	С	1.22	6.44	Loam	0.32
TN202	0.00	В	1.30	5.00	Loam	0.33

Table 4-7. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0602000204. More information is provided in Hiwassee-Appendix IV.

	COUNTY POPULATION			POPUL	MATED ATION IN RSHED	% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
	10.000	40.000	44.0=	4 ===	- 404	0.5
McMinn	42,383	46,000	11.27	4,776	5,184	8.5
Monroe	30,541	33,953	7.29	2,227	2,476	11.2
Polk	13,643	14,666	1.72	235	253	7.7
Total	86,567	94,619		7,238	7,913	9.3

Table 4-8. Population Estimates in Subwatershed 0602000204.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Etowah	McMinn	3,815	1,737	1,606	131	0	

Table 4-9. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0602000204.

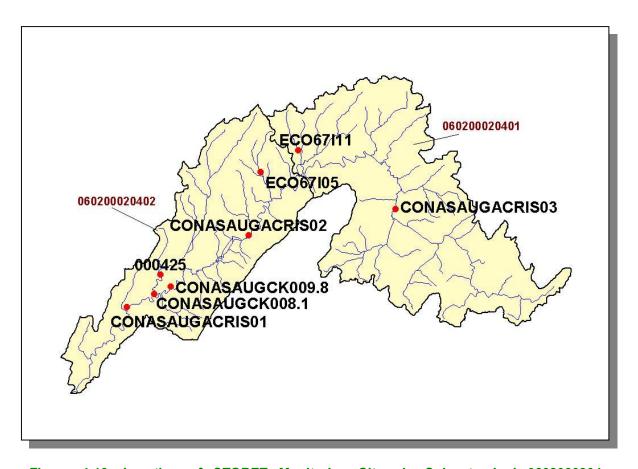


Figure 4-16. Location of STORET Monitoring Sites in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. More information is provided in Hiwassee-Appendix IV.

4.2.B.ii. Point Source Contributions.

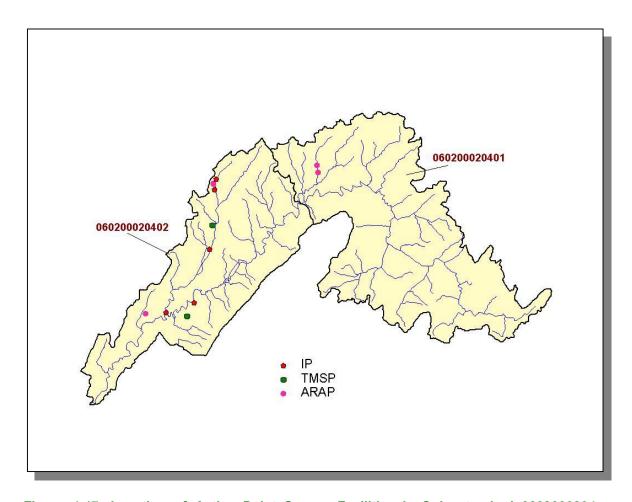


Figure 4-17. Location of Active Point Source Facilities in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. More information is provided in the following figures.

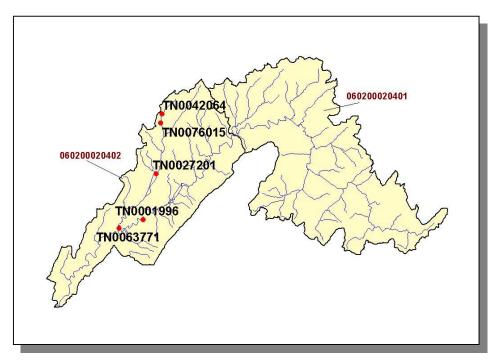


Figure 4-18. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. More information, including the names of facilities, is provided in Hiwassee-Appendix IV.

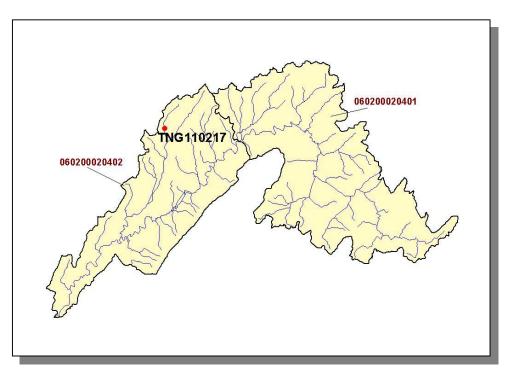


Figure 4-19. Location of Ready Mix Concrete Facilities in Subwatershed 0602000204. Subwatersheds 060200020401 and 060200020402 are shown for reference. More information, including the names of facilities, is provided in Hiwassee-Appendix IV.

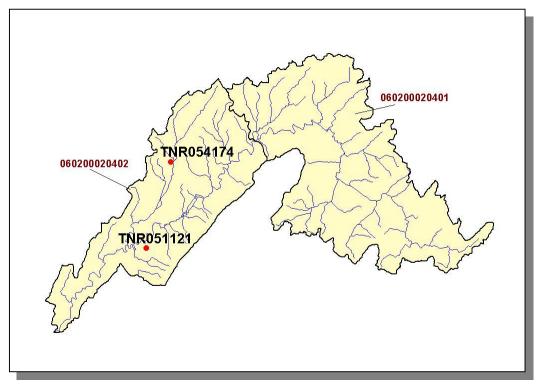


Figure 4-20. Location of TMSP Facilities in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. More information, including the names of facilities, is provided in Hiwassee-Appendix IV.

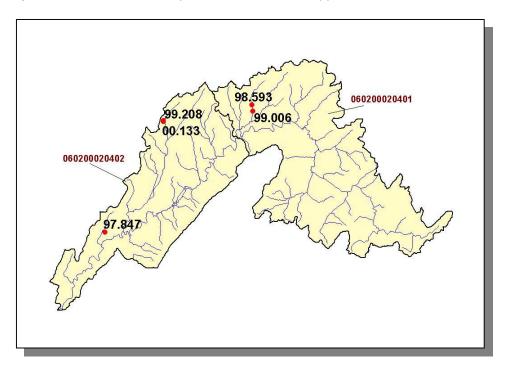


Figure 4-21. Location of ARAP Sites (Individual Permits) in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. More information, including the names of facilities, is provided in Hiwassee-Appendix IV.

4.2.A.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List

There are three NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 0602000204:

- TN0027201 (CSX Transportation) discharges to Cane Creek @ RM 4.5
- TN0042064 (Johns Manville) discharges to Crockett Springs Branch
 @ RM 1.2
- TN0076015 (Waupaca Foundry) discharges to Crockett Springs Branch

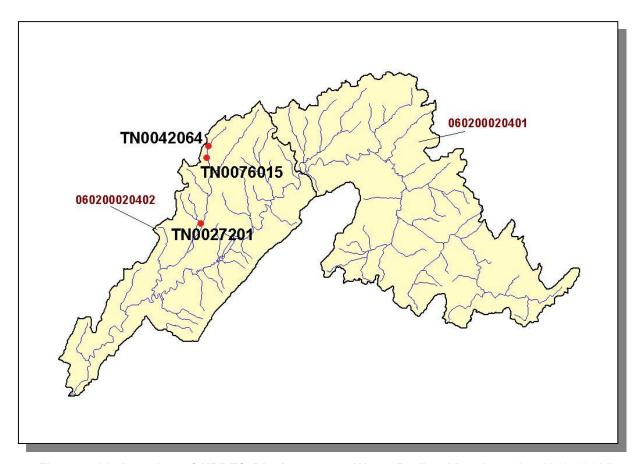


Figure 4-22. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 0602000204. Subwatershed 060200020401 and 060200020402 boundaries are shown for reference. The names of facilities are provided in Hiwassee-Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0027201	0.33	0.34	0.35	0.32	0.02750
TN0042064				0.07	0.09688
TN0076015	0.00	0.00	0.00	0.00	1.94000

Table 4-10. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0602000204. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT#	COD	Al	Fe	Cu	Zn
TN0027201	Х				
TN0076015		Х	Х	Х	X

Table 4-11. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0602000204. COD, Chemical Oxygen Demand.

PERMIT#	TSS	рН	WET	NH ₃	Cu	OIL and GREASE	TSS	DO	BOD₅
TN0027201	Х	Χ				X			
TN0042064		Χ	Х	Х	Χ		Χ	Х	Χ
TN0076015		Χ	Х			X	Χ		

Table 4-12. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0602000204. TSS, Total Suspended Solids; WET, Whole Effluent Toxicity; TSS, Total Suspended Solids; DO, Dissolved Oxygen; BOD₅, Biochemical Oxygen Demand (5-Day).

4.2.B.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold	Hogs	Sheep
1,762	4,817	860	6	987,001	38	6

Table 4-13. Summary of Livestock Count Estimates in Subwatershed 0602000204. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVENT	ORY	REMOVAL RATE		
	Forest Land (thousand	Timber Land	Growing Stock	Sawtimber	
County	acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Monroe	301.5	279.1	7.4	21.4	
Polk	224.7	214.1	6.2	21.1	
Total	526.2	493.2	13.6	42.5	

Table 4-14. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0602000204.

CROPS	TONS/ACRE/YEAR
Legume Grass (Hayland)	0.53
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.67
Non Agricultural Land Use	0.00
Corn (Row Crops)	15.72
Soybeans (Row Crops)	11.39
Tobacco (Row Crops)	5.65
Wheat (Close Grown Cropland)	6.20
Grass (Hayland)	0.36
Fruit (Horticulture)	0.19
Grass (Pastureland)	0.52
Grass, Forbs, Legumes (Mixed Pasture)	0.60

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 0602000204.